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| APPLICATION NO.           | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---------------------------|----------------|----------------------|-------------------------|------------------|--|
| 09/964,554                | 09/28/2001     | Bruce J. Holub       | 6580-262                | 2581             |  |
| 7:                        | 590 10/21/2003 |                      | EXAMINER                |                  |  |
| Bereskin & Parr           |                |                      | KRISHNAN, GANAPATHY     |                  |  |
| Box 401<br>40 King Street | West           |                      | ART UNIT PAPER NUMBER   |                  |  |
| Toronto, ON M5H 3Y2       |                |                      | 1623                    |                  |  |
| CANADA                    |                |                      | DATE MAILED: 10/21/2003 | )3               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| •   | Application No.   |   | Applicant(s)   |             |  |  |  |  |
|---|---|---|--|-------------|--|--|--|--|
|   | 09/964,554  |   | HOLUB ET AL.   |             |  |  |  |  |
| Office Action Summary   | Examiner  |   | Art Unit   |             |  |  |  |  |
|   | Ganapathy Krish   | t t   | 1623   |             |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |   |   |  |             |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period of the period for reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, hower within the statutory min will apply and will expire to cause the application to | ever, may a reply be time<br>imum of thirty (30) days<br>SIX (6) MONTHS from to<br>become ABANDONED | ely filed will be considered timely. he mailing date of this comr b (35 U.S.C. § 133). | nunication. |  |  |  |  |
| 1) Responsive to communication(s) filed on  | <u> </u>  |   |  |             |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th  | is action is non-fi   | nal.  |  |             |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |   |  |             |  |  |  |  |
| Disposition of Claims  4) ☐ Claim(s) 1,2,12,14-16,21 and 49 is/are pending  | og in the application   | nn  |  |             |  |  |  |  |
| ,   |   |   |  |             |  |  |  |  |
| <ul> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ∑ Claim(s) 9-12,14 and 15 is/are allowed.</li> </ul>  |   |   |  |             |  |  |  |  |
|   |   |   |  |             |  |  |  |  |
| 7)⊠ Claim(s) <u>1,2, 4, 70 and 21</u> is/are rejected.  | 6)⊠ Claim(s) <u>1,2, 4, 16 and 21</u> is/are rejected.  |   |  |             |  |  |  |  |
| 8) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  |   |   |  |             |  |  |  |  |
| Application Papers  | r cicolion roquiro  | nont.   |  |             |  |  |  |  |
| 9) The specification is objected to by the Examine  | r.  |   |  |             |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |   |  |             |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |   |  |             |  |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.   |   |   |  |             |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |   |   |  |             |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |   |   |  |             |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |   |  |             |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign   | priority under 35   | U.S.C. § 119(a)   | -(d) or (f).   |             |  |  |  |  |
| a)☐ All b)☐ Some * c)☐ None of:   |   |   |  |             |  |  |  |  |
| 1. Certified copies of the priority documents   | 1. Certified copies of the priority documents have been received.   |   |  |             |  |  |  |  |
| 2. Certified copies of the priority documents   | 2. Certified copies of the priority documents have been received in Application No                        |   |  |             |  |  |  |  |
| Copies of the certified copies of the prior application from the International But     See the attached detailed Office action for a list.  | reau (PCT Rule 1  | 7.2(a)).  |  | age         |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |   |   |  |             |  |  |  |  |
| a) The translation of the foreign language pro  |   |   |  |             |  |  |  |  |
| Attachment(s)   | . •   | - <del>-</del>  |  |             |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13  | 5)  |   | (PTO-413) Paper No(s).<br>atent Application (PTO-1                                     |             |  |  |  |  |

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### **DETAILED ACTION**

## Claim Objections

Claim 16 is objected to because of the following informalities: Claim 16 recites, "a method according to claim 1", but recites process steps for the isolation of the said soyasaponin. Claim 1 is a method of treating a kidney disease. If a method of isolation is what is intended in claim 16 then it is a duplicate of claim 9 and has to be cancelled. If a method of treatment of kidney disease is intended then the claim has to recite limitations that further narrow the limitations of claim 1. Appropriate correction is required.

#### Joint Inventors

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Philbrick et al (J Am. Soc. Nephrol., vol. 10, Sept. 1999, pp 85A; mailed to subscribers Aug. 26<sup>th</sup>, 1999).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4, 16 and 21 are drawn to a method of treating kidney disease, which is polycystic kidney disease, comprising administering a composition comprising an effective amount of soyasaponin B<sub>b</sub>.

Philbrick et al drawn to effect of soyasaponin extract on polycystic kidney disease, disclose the reduction in cyst volumes in mice fed with group B soyasaponins. Group B soyasaponins as disclosed by Philbrick et al is seen to include soyasaponin  $B_b$  in an amount equal to 20% of its total weight, even though Philbrick et al do not teach a specific soyasaponin. Based on this disclosure of Philbrick one of ordinary skill in the art will be able to determine the effective amount to treat humans/mammals without undue experimentation. Since soyasaponin  $B_b$  is present in the extract of Philbrick, the disclosure of Philbrick is a method of treating polycystic kidney disease.

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Claim 16 is also rejected since it is the same as claim 1. It does not matter how the soyasaponin is obtained. The method of isolation is not accorded patentable weight.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the disclosure of Philbrick is a method of treating polycystic kidney disease.

One of ordinary skill in the art would be motivated to do so in order to optimize the method of treatment of polycystic kidney disease.

## Conclusion

- 1. 1, 2, 4, 16 and 21 are rejected.
- 2. Claims 9-12, 14 and 15 drawn to method isolation of soyasaponin  $B_b$  via a combination of liquid chromatography and anion exchange column and preparative hydrophobic interaction chromatography using hexadecyltrimethylammonium-substituted SP sepharose as instantly claimed is neither taught or fairly suggested in the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

1235.

JAMES O. WILSON

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600

GK